

METHOD AND SYSTEM FOR PATH BUILDING IN A  
COMMUNICATIONS NETWORK

ABSTRACT OF THE DISCLOSURE

A method and system for managing an interconnect fabric that connects nodes. A network manager manages an interconnect fabric or network of routing devices (e.g., interconnect fabric modules, switches, or routers) to allow source nodes to transmit data to destination nodes. The network manager receives registration requests from source nodes to send data to destination nodes, configures the routing devices of the network to establish a path from each source node to its destination node, and provides a virtual address to each source node. The virtual address identifies a path from the source node to the destination node. The source node sends the data to its destination node by providing the data along with the virtual address to a routing device of the network. Upon receiving the data and the virtual address, a source-side port of each routing device in the path uses the virtual address to identify a destination-side port through which the data and the virtual address are to be transmitted. The network manager configures the routing devices by setting the mappings from a source-side port to a destination-side port for each routing device in the path.